

OLIVOIL GLUTAMATE

LIPAMINOACID WITH SURFACTANT AND FORMING PROPERTIES

OLIVOIL GLUTAMATE is a non ethoxylated, vegetal-derived surfactant. It is obtained through the combination of fatty acids from olive oil, as far as the lipophilic portion is concerned, and the sodium salt of the amino-acid glutamic acid, obtained from wheat gluten, for the hydrophilic portion. The result is a lipo-amino-acid with surface activity, mild detergent activity with excellent foaming power, suitable for shampoos, soaps, bath foam, as possible examples.

Once applied onto the skin, for the hydrolytic action of the stratum corneum enzymes, the external amide bond is hydrolyzed and the active agent is therefore separated in the constituting molecules: fatty acids and glutamic acid. The free aminoacid becomes part of NMF, while fatty acids, especially oleic and palmitoleic, for their high skin compatibility, enrich the composition of cell membranes in a direct way.

Designed to perform a mild detergent action with perceivable skin improvements, it is the ideal partner of Olivoil Surfactant. Lipo-aminoacids show special properties like antimicrobial effects against a wide range of microorganisms, and can be considered non toxic and only mild irritants. In cosmetics, they satisfy the need of surfactants with multi-functional and bio-compatible characteristics.

KEY CHARACTERISTICS

OLIVOIL GLUTAMATE is supplied as aqueous solution (24-30% a.m.) ready to be added in a cosmetic formulation; it does not require any pre-treatment. The product is compatible with anionic, non ionic and amphoteric substances; compatibility with cationic structures must be specifically verified. Supplied as sodium salt, it may influence the viscosity in systems sensitive to electrolytes. The suggested pH range of use in finished products is around 6.0 when employed as main or secondary surfactant. The addition at temperature below 40°C is suggested.

COSMETIC APPLICATIONS

OLIVOIL GLUTAMATE, when used as a delicate surfactant in shampoo, bubble bath and body soaps, creates excellent abundant and stable foam. It can be used in a wide range of cleansing cosmetics, for obtaining creamy touch and balanced cleansing power.

It has an optimal skin detergent action without harming or irritating it; while, on the contrary, improving the sensorial characteristics of the detergent formula. This surface-active agent is ideal for use in combination with Olivoil Surfactant as it optimises its detergent action.

OLIVE OIL AND SOFTNESS OF OLIVOIL PRODUCTS IN THE DETERGENCY

One significant characteristic of the Olivoil Products is given by the presence of long chain fatty acids, including oleic acid (68%), linoleic (9%) and linolenic (0,5%) and others



Head Office and Production:
Via G. Pastore, 1
25082 Botticino Sera (BS) ITALY
Tel: +39.030.2693532
Fax: +39.030.2193581
e-mail: kalichem@kalichem.it
www.kalichem.it

like myristic acid, palmitic acid...

Their presence explains the results of the tests carried out on the surfactants concerning their highly smoothing performance. A number of scientific tests show, in fact, that the molecules with short chain fatty acids, like for instance the lauric acid (12 carbon atoms), have a greater irritant power than the long chain fatty acids whereby the irritant power of a surfactant is influenced by the number of carbon atoms the fatty acid present in the molecule is made of.

These fatty acids of olive oil bond to wheat proteins have more similarities to both cutaneous secretion (sebum) and the cutaneous structures themselves (cheratine) making the Olivoil products very tolerable at cutaneous level and thus giving the finished products containing them a very nice psychoreologic effect.

The Olivoil products carry out an effective functional action, very soft and moisturizing, in the respect of a correct cutaneous physiology.

They leave on the skin a good feel of hydration, smoothness, softness and cleansing: after using a detergent containing an Olivoil product, one has a feel of cleanliness, satisfaction and well-being.

Olivoil products are used in association with aggressive traditional surfactants (like SLES reducing its irritant effect) in percentages ranging from 2% to 15% depending on the desired effect. To merely reduce the irritant effect of traditional surfactants, low percentages of Olivoil products (2 - 5%) may be employed. Higher percentages of Olivoil products are suggested (5 - 15%) where an immediate feel of hydration, smoothness and softness wants to be additionally achieved. Moreover, the higher is the percentage of Olivoil used, the higher is the sensory eudermic effect obtained.

OLIVOIL GLUTAMATE- PRODUCT SPECIFICATION

INCI NAME and COMPOSITION:	CAS No	EINECS/ELINCS	Range %
Sodium Olivoyl Glutamate	-	Biopolymer	25-30%
Aqua	7732-18-5	231-791-2	70-75%

PHYSICO - CHEMICAL ANALYSIS	METHOD	LIMITS
APPEARANCE:	Internal	CLEAR LIQUID
COLOUR:	Internal	COLOURLESS/PALE YELLOW
ODOUR:	Internal	SLIGHT, NEUTRAL
ACTIVE MATTER:	Internal	24 - 30%
DRY RESIDUE:	Internal	26 - 33%
pH	Internal	6.0 - 8.0
NITROGEN:	Internal	0.9 - 1.05%
MICROBIOLOGICAL SPECIFICATION:	Internal	< 100 UFC/g

SHELF LIFE: 12 months in the original containers

APPLICATIONS

Between 2 and 10% in skin cleansing products (foam bath, shampoos).
The product is ready to use and does not require any pre-treatment.
The addition to the bulk at temperature below 40°C is recommended.

OLIVOIL GLUTAMATE has obtained the ECOCERT certification (since Nov. 2006)